

3a ISSUED BY: Office of Naval Research

				Arl		, VA 22203			
AND THE RESIDENCE OF THE PARTY	MODIF	ICA	MOIT						
	1. INSTRUMENT TYPE:			3b. CF					
AL RESEARC	Grant 2. AUTHORITY:				2 . 3 0 0 INS NUN	BER:	****		
	10 USC 2358, 3					in with the control of the control o			
4. AWARD NO.: N00014-13-1-0550	5, MODIFICATION NO.:		DIFICATION TYP			07248-00			
8. ACTIVITY/AGENCY PROPOSAL NO.:	9. RECIPIENT PROPOS N/A		10. PROPOSAL 18-DEC-1		11. ACTI	VITY TYPE:	12. PROGRA	AM TYPE:	
	DI/EFT NUMBER:		TTANCE ADDRE	ESS (IF DIFI	FERENT	FROM BLOCK			
13a. ADDRESS: 1KVP4 710 UNIVERSITY OF MASSACHUSETT: OFFICE OF GRANT AND CONTRA ADMINISTRATION 70 BUTTERFIELD TERRACE AMHERST, MA 01003-9333	S AMHERST	_ Sam	e as block	C #1.3					
13d, BUSINESS OFFICE CONTACT:	·····								
CAROL P. SPRAGUE 13e, TELEPHONE NUMBER: 13f, EMAIL ADI									
(413) 5450698 sprague@resgs 15. RESEARCH TITLE AND/OR DESCRIPTION	OF DOO IFCT AND/OD DD	OPOSAL TI	TI F			.w.u		<u> </u>	
Factors Limiting Power Out	out of Benthic Mi	crobial	Fuel Cel	ls: Mec	hanis	tic and E	cological	Studies	
16. FUNDING ACTIVITY	AGENCY SHARE RE	CIPIENT SH	łare	•	TOTAL	17. CURRENT	FUNDING PER	IOD	
PREVIOUSLY OBLIGATED:	\$.00	\$	5.00		\$.00	1	N/A THROUGH		
	111,190.00	\$.00	\$111,19	0,00	;	N/A		
TOTAL OBLIGATED ON AWARD: \$	111,190.00	\$.00	\$111,19	0.00	18. PERIOD C			
FUTURE FUNDING:	501,173.00	\$.00 \$501,			3.00		01-MAY-13 THROUGH 30-APR-16		
GRANT TOTAL: \$	612,363.00	\$	\$.00 \$612						
19. ACCOUNTING AND APPROPRIATION DA' See attached Financial Acco 20a. PRINCIPAL INVESTIGATOR/RECIPIENT TECHNICAL REPRESENTATIVE: DEREK R LOVLEY	A: nunting Data Shee	21. TECH	INICAL REPRES IE: Linda A	ENTATIVE Chris	ey		21b. CODE: ONR 34	12	
		Offic 875 1	ce of Nava North Rand ngton, VA	olph St	reet				
20b. TELEPHONE NUMBER: 20c. EMAIL AD			EPHONE NUMB			21e, EMAIL A			
1	bio.umass.edu) 696-4504 Ministrative o			CHRISELSONR	.NAVY.MIL 23b. CODE:		
22. AWARDING OFFICE CONTACT 22a. NAME: Elizabeth Ford	22b. CODE: ONR BD025	ZUG. AUN	SING HATIVE U	a rioe.			N6287	9	
22c. ADDRESS: Offfice of Naval Research 875 North Randolph Street Arlington, VA 22203-1995 22d. TELEPHONE NUMBER: 22e. EMAIL AD	DRESS:	495 BOSTO	REG BOSTON SUMMER STR ON, MA 022 E: (617) 7 (617) 753	EET ROO 10-2109 53-3283	M 627				
(703) 696-2576 FORDEGONR.NA		25% 000	\E-	loes 5	ATERIT	TEEICE:	26h CODE		
24. SUBMIT PAYMENT REQUEST TO: Same as block #23a	25a. PAYING OFFICE: DFAS COLUMB-NAVY COLUMBUS, OH 432	ACQ HÇ	0251	Offi ATTN One 875	N: ONR Liber North	Naval Res BDCC ty Center	Street, Sui		

AMARD NO	AMADDIMODIE	CATION	MODIFICATION NO.				
AWARD NO. NO0014-13-1-0550	AWARD/MODIF	CATION					
27. SPECIAL INSTRUCTIONS:							
See "Special Requirements" Att	achment						
28. DELEGATIONS: The administration duties listed	helow have been delegated to the a	administrative office (I	block 23a). Upon request the awarding	office contact (block 22)			
will make their full text available. Please direct question	ons to the contacts @: http://w	ww.onr.navy.mi	1/Contracts-Grants/Regional	-Contacts.aspx			
Full Delegation							
ruii Deiegacion							
29. TERMS AND CONDITIONS: The following terms	and conditions are incorporated he	rein by reference with	n the same force and effect as if they w	ere given in full text.			
Upon request the awarding office contact named in b	lock 22 will make their full text avai	lable, or they can be t	found as described below.	· · · · · · · · · · · ·			
DOCUMENT The following documents may be foun	nd at:						
http://www.onr.navy.mil/Contracts-	Grants/submit-proposal/	grants-proposa	al/grants-terms-condition:	s.aspx			
TTD 2 C November 2002							
UAAC Acceptance C November 2003 Agency Specific February 2011							
UAWA Award A November 2003							
Core June 2011							
			DEDIOD.				
30. OPTIONS OPTION NO.	AMOUNT		PERIOD				
(1)							
(1) (2) (3)							
(4)							
at DEDOCTO, The fellowing toports must be submit	ted to the indicated addressees, in	the indicated quantiti	es, within 90 days following the expirat	ion or termination of			
the project. Final Technical Reports must be submit Block 12a of the SF298 as follows: "Approved for Pul	298. Report Documentation Page, a	accompanying them. I	Unless otherwise stated in the award/n	iodification, complete			
ADDRESSEE	REPORT TYPE			COPIES			
		anl Bonost W	ith cross	1			
See block #21	Interim Rese	Final Technical Report with SF298 Interim Research Performance Report (As Required)					
	with SF298						
See block #23a			Subcontracts - DD 882	1 1			
	Final Techni		ance Report (As Require	.			
	Final Federa	l Financial	Status Report - SF425	- 1			
	Including Li	ne Item 11_					
Defense Technical Information	Center Final Techni	cal Report w	ith SF298	1			
8725 John J Kingman Road Ste 0	944 Interim Rese	arch Perform	ance Report (As Require	ed) 1			
Fort Belvoir, VA 22060-6218	with SF298		•				
See block #26a	Report of In	ventions and	Subcontracts - DD 882	1 .			
See Diock #20a							
		1		1			
Naval Research Laboratory	Final Techni	cal keport	ance Report (As Requir				
ATTN: CODE 5596 4555 Overlook Avenue SW	with SF298	arch rerrer	and helpone (in in in-in-				
Washington, DC 20375-5320							
32, FOR THE REGIPIENT			D STATES OF AMERICA				
32a. SIGNATURE OF PERSON AUTHORIZED TO		33a, SIGNATURE OI (b) (6)	F AWARDING OFFICER	n			
N/A - SIGNATURE NOT REQUIRE		\ / \=/					
32b. NAME AND TITLE OF SIGNER	326. DATE SIGNED	33b. NAME AND TIT	LE OF AWARD OFFICER	33c, DATE SIGNED			

		NAVY INTERNAL USE ONLY REF DOC/ACRN	PR#13PR07248-00 FRC:4512		1	for COMPTROLLER, ONR CONTRACT REVIEWED
	ment in a	AMOUNT (CRITICAL)	\$111,190.00	\$111,190.00	\$111,190.00	for COMPTROLLE
FINANCIAL ACCOUNTING DATA SHEET - NAVY 13 MOD (CRITICAL) 13 PR NUMBER 13 PR 07248-00	7.	A K. COST CODE PDLI	000	PAGE TOTAL	GRAND TOTAL	
3. MOD (CRITICAL)		F. G. H. AAA I. J. PAA (CRITICAL)	349 0 068342 2D 00			COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY DATE:
FINANC 2. SPIIN (CRITICAL)		C. B. E. SUBHEAD OBJ PARM (CRITICAL)	WIAE 410 RA			
1. CONTRACT NUMBER (CRITICAL)	NOCOT# - TR - TROOP	CLINSLIN A. A. APPROPRIATION (CRITICAL)	AA 1731319			PREPAREDIAUTORIZED BY: DATE:

COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY for COMPTROLLER, ONR CONTRACT REVIEWED	GRAND TOTAL ROLLER APPROVAL: -OR FISCAL DATA AND SIGNATURE 3Y	TOTAL	GRAND TOTAL ROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE 37
ROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE 3Y	FOLLER APPROVAL: -OR FISCAL DATA AND SIGNATURE 37	ROLLER APPROVAL: COR FISCAL DATA AND SIGNATURE 3Y	ROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE 3Y
KOLLEK APPROVAL: FOR FISCAL DATA AND SIGNATURE 3Y	KOLLEK APPKOVAL: -OR FISCAL DATA AND SIGNATURE 3Y	KOLLEK APPKOVAL: -OR FISCAL DATA AND SIGNATURE 3Y	ROLLER APPROVAL: -OR FISCAL DATA AND SIGNATURE 37
ACK FISCAL DATA AND SIGNATIONS:	אל ווספור לאיז איזען מאום מיזען איזען	3Y	SY AND SIGNAL ONE:
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AWARD NO.	SPECIAL REQUIREMENTS	MODIFICATION NO.	
N00014-13-1-0550			
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3a, ISSUED BY: Office of Naval Research 875 North Randolph Street

	MODIF	ICA	TIO	Ν	Arling	ton, VA 2220	3-1995
	1. INSTRUMENT TYPE:		••••		3b, CFDA:		
AVAL RESEARCH	Grant				12.3		
3 100	2. AUTHORITY:	1 1100	6304		3c, DUNS I	NUMBER:	
4. AWARD NO.:	10 USC 2358, 3 5. MODIFICATION NO.:		DIFICATION T	YPE:	7. PR NO.:		
N00014-13-1-0550	P00006		crement			01074-01	
8. ACTIVITY/AGENCY PROPOSAL NO.: N/A	9, RECIPIENT PROPOSA N/A	L NO.:	10, PROPO 18-DEC		TE: 11. A	CTIVITY TYPE:	12. PROGRAM TYPE:
•	DI/EFT NUMBER:		ITTANCE ADI			NT FROM BLOCK	< 13):
UNIVERSITY OF MASSACHUSETTS OFFICE OF GRANT AND CONTRAC ADMINISTRATION 70 BUTTERFIELD TERRACE AMHERST, MA 01003-9333							
13d. BUSINESS OFFICE CONTACT:							
CAROL P. SPRAGUE		1					
13e. TELEPHONE NUMBER: 13f. EMAIL ADD sprague@resgs	JRESS: .umass.edu						
15. RESEARCH TITLE AND/OR DESCRIPTION PE IF: Factors Limiting Pow Studies	OF PROJECT AND/OR PRO Ver Output of Bent	POSALT hic Mi	ITLE: icrobial	Fuel	Cells:	Mechanisti	c and Ecological
16. FUNDING ACTIVITY/	AGENCY SHARE REC	IPIENT SI	HARE		TOTA		FUNDING PERIOD
PREVIOUSLY OBLIGATED: \$	597,431.00	\$	\$.00	\$59	7,431.0		N/A THROUGH
OBLIGATED BY THIS ACTION:	\$14,932.00	\$	5.00	\$1	4,932.0	0	N/A
TOTAL OBLIGATED ON AWARD: \$	612,363.00	\$	5.00	\$61	2,363.0	0 18. PERIOD (DF PERFORMANCE 01-MAY-13
FUTURE FUNDING:	\$.00	Ş	\$.00		\$.0	0	THROUGH 30-APR-16
GRANT TOTAL: \$	612,363.00	Ş	\$.00	\$61	2,363.0	0	30 1111 10
19. ACCOUNTING AND APPROPRIATION DAT See attached Financial Acco		(8)			•		
20a. PRINCIPAL INVESTIGATOR/RECIPIENT			NICAL REPR				21b. CODE:
TECHNICAL REPRESENTATIVE: DEREK R LOVLEY		21c. ADD	ME: Linda DRESS:	A. C	hrisey		ONR 342
	,	Offic 875 1	ce of Na North Ra ngton, V	ndolp	h Stree	t	
20b, TELEPHONE NUMBER: 20c, EMAIL ADI	DRESS:	21d. TEL	EPHONE NUI	MBER:		21e. EMAIL A	DDRESS:
(413) 5459651 dlovley@micro	obio.umass.edu) 696-45			LINDA.CHRIS	
22. AWARDING OFFICE CONTACT 22a. NAME: Elizabeth Ford	22b. CODE: ONR BD025	23a, ADN	MINISTRATIVE	E OFFIC	E:		23b, CODE: N62879
22c. ADDRESS: Office of Naval Research 875 North Randolph Street Arlington, VA 22203-1995 22d. TELEPHONE NUMBER: 22e. EMAIL ADI	DRESS:	495 BOST PHON	REG BOST SUMMER S ON, MA 0 E: (617) (617) 7	TREET 2210- 753-	T ROOM 6 -2109 -3283	527	
(703) 696-2576 BLIZABETH. FO	RD@NAVY,MIL						
24. SUBMIT PAYMENT REQUEST TO:	25a, PAYING OFFICE:	25b, COE			26a, PATE	NT OFFICE:	26b. CODE: NO 0 0 1 4
Same as block #23a	DFAS COLUMB. NORT COLUMBUS, OH 4321	H ENTI			ATTN: C One Lib 875 Nor	of Naval Res NR BDCC Perty Center th Randolph on, VA 22203	street, Suite 1425

AWARD NO.	AWAR	D/MODIFI	CATION	MODIFICATION NO. P00006	
N00014-13-1-0550				1 200004	
27. SPECIAL INSTRUCTIONS: See "Special Requirements"	Attachment				
See Special Reduitements					
			destrict and the office (block 22a) Upon request the awarding 0	ffice contact (block 22)
28. DELEGATIONS: The administration duties li will make their full text available. Please direct q	isted below have bee	n delegated to the a	dministrative office (1/Contracts-Grants/Regional-	Contacts asnx
		http://w	ww.onr.navy.ml	1/Contracts-Glasses/Regional-	Concacestaspin
Full Delegation					
					Ì
29. TERMS AND CONDITIONS: The following to	terms and conditions	are incorporated he	rein by reference with	n the same force and effect as if they we	re given in full text.
29. TERMS AND CONDITIONS: The following to Upon request the awarding office contact name	d in block 22 will mal	ce their full text avail	able, or they can be	found as described below.	
DOCUMENT	found at.				
The following documents may be http://www.onr.navy.mil/Contrac	ts-Grants/sub	mit-proposal/	grants-propos	al/grants-terms-conditions	.aspx
Standard Terms and Conditions f					
Standard Terms and Conditions i	or Research G	rants - Febru	ary 2011 (Age	ncy Specific)	
UACC Acceptance C					
UAWA Award A					
		AMOUNT		PERIOD	
30. OPTIONS OPTION NO.		AWOON		,	
(1)					
(2) (3)					
7.45			the indicated guestit	inc within 90 days following the expiration	on or termination of
31, REPORTS: The following reports must be a the project. Final Technical Reports must have	a SE298 Report Uda	cumentation Page, 8	(ccompanying ucin.	Unless otherwise stated in the award/mo	dification, complete
Block 12a of the SF298 as follows: "Approved f	or Public Release; a	SUIDUIGH IS CHIRING	≥d"		COPIES
ADDRESSEE	l i	REPORT TYPE			
See block #21	E	inal Techni	cal Report w	ith SF298	d) 1
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See block #23a	F	Report of In	ventions and	Subcontracts - DD 882	1
230 2220	I	Final Techni	cal Report	ance Report (As Require	.d) 1
	1	interim kese Final Federa	arch Feriol 1 Financial	Status Report - SF425 -	1
	1	Including Li	ne Item 11		
Defense Technical Informati	on Center E	inal Techni	cal Report w	ith SF298	1
8725 John J Kingman Road St	e 0944	Interim Rese	arch Perform	ance Report (As Require	d) 1
Fort Belvoir, VA 22060-6218	· v	vith SF298			
See block #26a	F	Report of In	ventions and	Subcontracts - DD 882	1
500 230011 11-01		-			
Naval Research Laboratory		Final Techni	cal Report		1
ATTN: CODE 5596		Interim Rese	earch Perform	aance Report (As Require	ed) 1
4555 Overlook Avenue SW	,	with SF298			
Washington, DC 20375-5320			•		
32 FOR THE RECIPIENT			33. FOR THE UNIT	ED STATES OF AMERICA	
32a SIGNATURE OF PERSON AUTHORIZE	D TO SIGN		33a, SIGNATURE C	F AWARDING OFFICER	<u> </u>
N/A - SIGNATURE NOT REQU		ΔΜΑΡΩ	(b) (6)		
N/A SIGNATURE NOT REQU	MALD ON HING	A T V V V			
32b, NAME AND TITLE OF SIGNER	320	: DATE SIGNED	33b. NAME AND TI	TLE OF AWARD OFFICER	33c. DATE SIGNED
OLO, HANKE AND THEE OF CHOICES			Elizabeth H		23-FEB-16

Elizabeth Ford

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FINANCIAL ACCOUNTING DATA SHEET - NAVY	:

			NAVY IN EKNAL USE ONLY		PK#16FK010/4-01 FKC:	\$14,932.00	\$14,932.00	for COMPTROLLER, ONR CONTRACT REVIEWED	
		7.	AMOUNT	(CRITICAL)	\$14, 932.00	\$14,9	\$14,9	for CC	
					000 NEIO	PAGE TOTAL	GRAND TOTAL		
4. PR NUMBER	16PR01074-01		K. COST CODE	PROJ UNIT	000000				
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TINDION S MODICENTICAL)			H. AAA IT	(CRITICAL)	066342 2D			COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY DATE:	
MODI (CRITICAL)	P00006		F. G.	;	349			COMPTROLLER FOR FISC BY	
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T CEDITION (CEDITION)			C. D.		WIRE 410				
		SNITNIIO	MOITVIO	(CRITICAL)	1761319				
(180) Tidos and an instance of	NOMBER (SRITS -13-1-055(SULLA TEST TEST TO CONTINUE OF ACCOUNTING	A. A. CINE OF ACT	(CRITICAL)	G.			PREPARED/AUTORIZED BY: DATE:	
, C.	TOONING	# H D D D M	CLIN/SLIN					PREPARE! DATE:	

	NAVY INTERNAL USE ONLY REF DOC/ACRN				CT REVIEWED
	AMOUNT (CRITICAL)		00	\$	for COMPTROLLER, ONR CONTRACT REVIEWED
2. SPIIN (CRITICAL) 3. MOD (CRITICAL) 4. PR NUMBER 1.6PR01074-01	ACCOUNTING CITATION 8.	This page is intentionally blank	PAGE TOTAL	GRAND TOTAL	COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY DATE:
TRACT NUMBER (C 4-13-1-055	5. CLIN'SLIN 6. ACRN 7. (CRITICAL)			***************************************	PREPARED/AUTHORIZED BY: DATE:

ONR AWARD FORM (10/99) - version 1.1

CAMPAGE NO.	ODECIAL DECLUDEMENTS	MODIFICATION NO.	
AWARD NO. N00014-13-1-0550	SPECIAL REQUIREMENTS	P00006	
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OFFICE OF	ROH (1)	AW MODIF 1. INSTRUMENT TYPE: Grant 2. AUTHORITY: 10 USC 2358, 5. MODIFICATION NO.:	31 USC	TION	3h	875 Nort	f Naval Res h Randolph n, VA 22203	Street		
N00014-13-1-0550		P00005	Inc	crement		16PR01				
8. ACTIVITY/AGENCY PROPO	OSAL NO.:	9, RECIPIENT PROPOS	SAL NO.:	10. PROPOSA 18-DEC-1		11. ACT	IVITY TYPE:	12. PROGR. onr	AM TYPE:	
13. ISSUED TO 13b. CA	GE: 13c. I	EDI/EFT NUMBER:		TTANCE ADDR	ESS (IF	DIFFERENT	FROM BLOCK			
UNIVERSITY OF MA. OFFICE OF GRANT ADMINISTRATION 70 BUTTERFIELD T. AMHERST, MA 0100. 13d. BUSINESS OFFICE CON CAROL P. SPRAGI	SSACHUSETTAND CONTRA ERRACE 3-9333 ITACT: JE	ACT		e as bloc	1. II. 12					
(413) 5450698	sprague@reso	JENESS. Js.umass.edu								
15.RESEARCH TITLE AND/O PE IF: Factors L: Studies	R DESCRIPTIO Lmiting Po	N OF PROJECT AND/OR PR ower Output of Ber	OPOSALTI thic Mi	TLE: .crobial F	uel C	ells: M	echanisti	c and Eco	logical	
16. FUNDING	ACTIVIT	Y/AGENCY SHARE RE	CIPIENT SH	IARE		TOTAL		FUNDING PER	IOD	
PREVIOUSLY OBLIGATED:	5	\$522,431.00	\$.00	\$522,	431.00	1	√A THROUGH		
OBLIGATED BY THIS ACTION	ł:	\$75,000.00	\$.00	\$75,	000.00	î			
TOTAL OBLIGATED ON AWA	RD:	\$597,431.00	\$.00	\$597,	431.00	18. PERIOD O	PERIOD OF PERFORMANCE		
FUTURE FUNDING:		\$14,932.00	\$.00	\$14,	932.00		01-MAY-13 THROUGH	3	
GRANT TOTAL:	1	\$612,363.00	\$	1.00	\$612,	363.00		30-APR-16	5	
19. ACCOUNTING AND APPR See attached Fina			t (s)		• • •	······································				
20a, PRINCIPAL INVESTIGAT TECHNICAL REPRESENTATI DEREK R LOVLEY			21a, NAM 21c, ADD Offic 875 N	NICAL REPRES E: Linda A RESS: ce of Nava Yorth Rand ngton, VA	A. Chr al Res dolph	risey search Street		21b. CODE: ONR 34	12	
20b. TELEPHONE NUMBER:	20c, EMAIL A	DDRESS:	21d, TELE	PHONE NUMB	ER:		21e, EMAIL AD	DRESS:		
(413) 5459651		cobio.umass.edu) 696-4504			LINDA, CHRISE			
22. AWARDING OFFICE CON 22a. NAME: Elizabeth		22b, CODE: ONR BD025	23a. ADM	INISTRATIVE C	FFICE:			23b. CODE: N6287	9	
22c. ADDRESS: Office of Naval Re 875 North Randolph Arlington, VA 2226	esearch 1 Street 13-1995 22e. EMAIL AI		495 S BOSTO PHONE	REG BOSTON SUMMER STR DN, MA 022 E: (617) 7 (617) 753	REET F 210-21 753-32	ROOM 627 109 183		M0207	•	
(703) 696-2576 24. SUBMIT PAYMENT REQU		25a, PAYING OFFICE:	25b. COD	E:	26	a. PATENT	OFFICE:	26b, CODE:		
Same as block #23a		DFAS COLUMB. NOR COLUMBUS, OH 432	HO!	0337 -HQ0337	O: A' O: 8'	ffice of TTN: ONR ne Liber 75 North	Naval Rese	Street, Sui		

AWARD NO.	AWARD/MODIF	ICATION	MODIFICATION NO.	
N00014-13-1-0550	AWA		P00005	
27. SPECIAL INSTRUCTIONS: See "Special Requirements"	Attachment			
See "Special Requirements	The Comments			
		- durinistrative office (block 23a). Upon request the awarding	ng office contact (block 22)
28. DELEGATIONS: The administration duties will make their full text available. Please direct	listed below have been delegated to the questions to the contacts @:	administrative office (1/Contracts-Grants/Regiona	al-Contacts.aspx
	- http://t	www.onr.navy.mi	1/Concraces orange, neg-	
Full Delegation				
29. TERMS AND CONDITIONS: The following	terms and conditions are incorporated he	erein by reference wit	h the same force and effect as if they	were given in full text.
Upon request the awarding office contact name	ed in block 22 will make their full text ava	liable, or they can be	Tourid as described below.	
DOCUMENT The following documents may be	found at:	/	-1/grants_terms_conditio	ons.aspx
http://www.onr.navy.mil/Contra	acts-Grants/submit-proposal,		al/granes-cerms commission	
Standard Terms and Conditions	for Research Grants - June	2011 (Core)	ncy Specific)	
Standard Terms and Conditions Standard Terms and Conditions UACC Acceptance C	for Research Grants - Febru	uary 2011 (Age	ncy specific,	
UAWA Award A				j
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30, OPTIONS OPTION NO.	AMOUNT	 -	PERIOD	
(1)				
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(3)				
	submitted to the indicated addressees, in	n the indicated quanti	ties, within 90 days following the expi	ration or termination of d/modification, complete
31. REPORTS: The following reports must be the project. Final Technical Reports must hav Block 12a of the SF298 as follows: "Approved			Offices officially outload in the division	
ADDRESSEE	REPORT TYPE			COPIES
See block #21	Final Techn	ical Report v	vith SF298	1
See Diock #21	Interim Rese	earch Perfor	nance Report (As Requi	ired) 1
	with SF298			
	1			
See block #23a	Report of I	nventions and	d Subcontracts - DD 88	32 1
See Diock #234	⊽inal Techn	ical Report	mance Report (As Requi	1
	Interim Res	earch Perion al Financial	Status Report - SF425	5 - 1
	Including L	ine Item 11	1	
Defense Technical Informat	-i Contor Winal Techni	ical Report V	with SF298	1
8725 John J Kingman Road S		earch Perfor	mance Report (As Requi	ired) 1
Fort Belvoir, VA 22060-621	l8 with SF298			
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See block #26a	Report of I	nventions and	d Subcontracts - DD 88	32 1 .
See Brock #200				
Naval Research Laboratory	Final Techn	ical Report		1
ATTN: CODE 5596	Interim Res	earch Perfor	mance Report (As Requ	ired) 1
4555 Overlook Avenue SW	with SF298		·	
Washington, DC 20375-5320				
32 FOR THE RECIPIENT		33. FOR THE UNIT	ED STATES OF AMERICA	
324, SIGNATURE OF PERSON AUTHORIZ	(ED TO SIGN	3	OF AWARDING OFFICER	
N/A - SIGNATURE NOT REC		(b) (6)		
MA GIGINATURE NOTICES			<u></u>	
32b. NAME AND TITLE OF SIGNER	32c DATE SIGNED		ITLE OF AWARD OFFICER	33c. DATE SIGNED 19-NOV-15
		Ellen Simo	noff	T2-MOA-T2

ONR AWARD FORM (10/99) - version 1.1

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		AMOUNT	(CRITICAL)		\$75,000.00	\$75,000.00	for COMPTROLLI
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4. AWARD NO.:		5. MODIFICATION NO.:	•	IFICATION T	YPE:	7. PR NO.:			
N00014-13-1-0550 8. ACTIVITY/AGENCY PROPOS/	AL NO :	P00004 9. RECIPIENT PROPOSA		rement	SAL DAT	15PR02	U52-U1 IVITY TYPE:	12, PROGR	AM TYPE:
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13. ISSUED TO 13b, CAGE 13a, ADDRESS: 1KVP4	: 13c, ED	DI/EFT NUMBER:		TTANCE ADI			FROM BLOCK	13):	
UNIVERSITY OF MASS OFFICE OF GRANT AN ADMINISTRATION 70 BUTTERFIELD TER AMHERST, MA 01003-	D CONTRAC RACE 9333								
CAROL P. SPRAGUE									
13e. TELEPHONE NUMBER: 1 (413) 5450698	i3f. EMAIL ADD sprague@resgs	RESS: .umass.edu	1						
15. RESEARCH TITLE AND/OR PE IF: Factors Lim Studies	DESCRIPTION iting Pow	OF PROJECT AND/OR PRO er Output of Bent	POSALTI hic Mi	TLE: crobial	Fuel	Cells: M	lechanisti	c and Eco	logical
16, FUNDING	ACTIVITY	AGENCY SHARE REC	IPIENT SH	ARE		TOTAL		FUNDING PER	IOD
PREVIOUSLY OBLIGATED:	\$3	346,716.18	\$.00	\$346	6,716.18	ľ	I/A THROUGH	
OBLIGATED BY THIS ACTION:	\$:	175,714.82	\$.00	\$17	5,714.82	ľ		
TOTAL OBLIGATED ON AWARD): \$!	522,431.00	\$.00	\$522	2,431.00	18. PERIOD O	F PERFORMAN	
FUTURE FUNDING:	:	\$89,932.00	\$.00	\$8:	9,932.00		01-MAY-13 THROUGH	
GRANT TOTAL:	\$6	512,363.00	\$.00	\$612	2,363.00		30-APR-16	•
19. ACCOUNTING AND APPROF See attached Finance 20a. PRINCIPAL INVESTIGATOR TECHNICAL REPRESENTATIVE DEREK R LOVLEY	cial Acco	unting Data Sheet	21. TECH 21a. NAM 21c. ADD		A. C.	hrisey		21b. CODE: ONR 34	12
			875 N Arlin	gton, W	ndolp A 222	h Street	Ta		
20b. TELEPHONE NUMBER: 2			l .	PHONE NUM			21e. EMAIL AD		
(413) 5459651	dlovley@micro	bio.umass.edu 22b.CODE:		696-45		E:	LINDA.CHRISE	23b. CODE:	
22a, NAME: Elizabeth Fo		ONR BD255						N6287	9
22c. ADDRESS: Office of Naval Res 875 North Randolph Arlington, VA 22203 22d. TELEPHONE NUMBER: 2	Street	DRESS:	495 S BOSTO PHONE	REG BOST SUMMER S DN, MA 0 E: (617) (617) 7	TREET 2210- 753-	ROOM 627 2109 3283	7		
(700) 000 2070	BLIZABETH. FOR		25h COD	5 .		26a, PATENT	OFFICE:	26b, CODE:	
24. SUBMIT PAYMENT REQUES Same as block #23a	***************************************	5a.PAYING OFFICE: DFAS COLUMB. NORT COLUMBUS, OH 4321	H ENTL)337 -HQ0337		Office of ATTN: ONR One Liber 875 North	Naval Rese	N0001 earch Street, Sui	

				HODISION TION NO	
AWARD NO.	AWARD	MODIFICA	TION	MODIFICATION NO. P00004	i
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27. SPECIAL INSTRUCTIONS: See "Special Requirements"	Attachment				
See "Special Requirements"	nc cacamono			-	
					- (San anniont (block 22)
28. DELEGATIONS: The administration duties I	sted below have been de	elegated to the adminis	strative office (blo	ock 23a). Upon request the awarding	office contact (block 22)
will make their full text available. Please direct o	uestions to the contacts	(Q). http://www.or	nr.navy.mil/	/Contracts-Grants/Regional	-Contacts.aspx
Full Delegation					1
· -					
29. TERMS AND CONDITIONS: The following	erms and conditions are	incorporated herein by	reference with t	the same force and effect as if they w	ere given in full text.
Upon request the awarding office contact name	d in block 22 will make th	<u>reir full text available, c</u>	or they can be to	und as described below.	
DOCUMENT The following documents may be	found at:				
The following documents may be http://www.onr.navy.mil/Contrac	ts-Grants/submit	-proposal/gran	ts-proposal	l/grants-terms-conditions	,aspx
a a mana and denditions f	or Pegearch Gran	nts - June 2011	(Core)		
Standard Terms and Conditions i Standard Terms and Conditions i	or Research Gran	nts - February	2011 (Agend	cy Specific)	
UACC Acceptance C					
UAWA Award A					
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31, REPORTS: The following reports must be a the project. Final Technical Reports must have	a SE298 Report Docum	entation Paue, accord	panying them. U	nless otherwise stated in the award/n	odification, complete
Block 12a of the SF298 as follows: "Approved to	or Public Release; distrib	oution is Unlimited".			
ADDRESSEE		ORT TYPE			COPIES
	Fin	al Technical	Report wi	th SF298	1
See block #21	Int	erim Research	n Performa	nce Report (As Require	ed) 1.
	wit	:h SF298			
		· .	 	5 1 DD 003	
See block #23a		oort of Invent al Technical		Subcontracts - DD 882	1 1
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	Fir	al Federal Fi	inancial S	tatus Report - SF425	- 1
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Defense Technical Informati	on Conter Fin	al Technical	Report wi	th SF298	1
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4555 Overlook Avenue SW	wit	th SF298			
Washington, DC 20375-5320					
		on P	OD THE LIMITER	STATES OF AMERICA	
32 FOR THE RECIPIENT	D TO SIGN	33. FG	SIGNATURE OF	AWARDING OFFICER	
32a SIGNATURE OF PERSON AUTHORIZE		(1-			
N/A - SIGNATURE NOT REQU	IIRED ON THIS AV	VARD (C	o) (6)		
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32b NAME AND TITLE OF SIGNER	32G. D.	Control of the Contro		E OF AWARD OFFICER	33c. DATE SIGNED 11-FEB-15
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	1. CONTRACT		OLIN/SLIN					PREPARED/	DATE:

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3. MOD (CRITICAL) 4. PR NUMBER P00004 15PR02052-01	ACCOUNTING CITATION	page is intentionally blank		COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY
L) 2. SPIIN (CRITICAL)	¥	This		
1. CONTRACT NUMBER (CRITICAL)	5. 6. ACRN 7. CRINGLIN (CRITICAL)			PREPARED/AUTHORIZED BY:

AWARD NO.	SPECIAL REQUIREMENTS	MODIFICATION NO.				
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3a ISSUED BY:
Office of Naval Research

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		1. INSTRUMENT TYPE:		****		3b. CFDA:			
AVAL RESEARCH	-242462	Grant				12.30			
		2. AUTHORITY:	1 1100	6204		3c. DUNS N	IUMBER:		
4. AWARD NO.:		10 USC 2358, 3 5. MODIFICATION NO.:		DIFICATION	TYPE:	7. PR NO.:			
N00014-13-1-0550		P00003		crement		1	2052-00		
8. ACTIVITY/AGENCY PROPOSAL NO N/A	D.:	9. RECIPIENT PROPOSA N/A	AL NO.:	10. PROP		TE: 11, A	CTIVITY TYPE:	12. PROGRA onr	M TYPE:
13, ISSUED TO 13b, CAGE:	13c, EDI/I	FT NUMBER:	14, REN			(IF DIFFERE	NT FROM BLOC		
13a, ADDRESS: 1KVP4 UNIVERSITY OF MASSACH OFFICE OF GRANT AND C ADMINISTRATION 70 BUTTERFIELD TERRAC AMHERST, MA 01003-933	ONTRACT E	AMHERST	San	ne as bl	ock #	1.3			
13d. BUSINESS OFFICE CONTACT:									
CAROL P. SPRAGUE 13e. TELEPHONE NUMBER: 13f. E	MAIL ADDRI	-ss·	-						
	ue@resgs.u								
15. RESEARCH TITLE AND/OR DESC Factors Limiting Powe	RIPTION O r Outpu	FPROJECT AND/OR PRO t of Benthic Mic	POSALT crobia	TLE: 1 Fuel (Cells:	Mechan	istic and I	Ecological	Studies
16. FUNDING A	CTIVITY/AG	ENCY SHARE REC	IPIENT S	HARE		TOTA	L 17. CURREN	T FUNDING PERI	OD
PREVIOUSLY OBLIGATED:	\$31	3,953.00	:	\$.00	\$31	3,953.0	o	N/A THROUGH	
OBLIGATED BY THIS ACTION:	\$3	2,763.18	\$	\$.00	\$3	2,763.18	3	N/A	
TOTAL OBLIGATED ON AWARD:	\$34	6,716.18	Ş	00.8	\$34	6,716.18	18. PERIOD	OF PERFORMANC	CE
FUTURE FUNDING:	\$26	5,646.82		\$.00	\$26	5,646.8	2	01-MAY-13 THROUGH 30-APR-16	
GRANT TOTAL:	\$61	2,363.00	:	\$.00	\$61	2,363.00		30-APK-10	
19. ACCOUNTING AND APPROPRIAT See attached Financial	ION DATA: . Accour	ting Data Sheet	(ສ)			,		:	
20a, PRINCIPAL INVESTIGATOR/REC	IPIENT			INICAL REP				21b. CODE:	
TECHNICAL REPRESENTATIVE: DEREK R LOVLEY				ME: Linda	a A. C	hrisey		ONR 34	2
BEAGA A ZOVEST			875	ce of Na	indolp	esearch h Stree 03-1995	t		
20b, TELEPHONE NUMBER: 20c, E	MAIL ADDR	ESS:	21d. TEL	EPHONE N	JMBER:	***	21e, EMAIL A	DDRESS:	
(413) 5459651 dlov1	ey@microbio	.umass.edu	(703) 696-4	504		LINDA.CHRIS	SEYGNAVY.MIL	
22. AWARDING OFFICE CONTACT 22a. NAME: Elizabeth Ford		22b. CODE: ONR BD255	23a. ADN	/INISTRATI\	Æ OFFIC	E:		23b. CODE: N62879)
22c ADDRESS: Office of Naval Resear 875 North Randolph Str Arlington, VA 22203-19	eet	Lucial	495 BOST PHON	REG BOSS SUMMER S ON, MA (E: (617)	STREET 02210- 0753-	! ROOM 6 2109 3283	27		
	MAIL ADDR]	/ /		. =			
(703) 696-2576 BLIZE 24. SUBMIT PAYMENT REQUEST TO	ABETH PORDS	NAVY.MIL PAYING OFFICE:	25b, CO	OF:		26a, PATEN	IT OFFICE	26b, CODE:	
Same as block #23a	. 254			0337		204, ; 7,121	0.1102.	N00014	
Samo as stock Hasa		7AS COLUMB. NOR'I DLUMBUS, OH 4321			,	ATTN: OR One Libe 875 Nort	erty Center	Street, Suit	ce 1425

		IEIO A TION	MODIFICATION NO.	
AWARD NO. NO0014-13-1-0550	AWARD/MOD	FICATION	P00003	L
27. SPECIAL INSTRUCTIONS:				1
See "Special Requirements"	Attachment			
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28. DELEGATIONS: The administration duties	listed holay have been delegated to	the administrative office	(block 23a). Upon request the awarding	office contact (block 22)
26. DELEGATIONS: The administration duties will make their full text available. Please direct	questions to the contacts @:	//www.onr.navv.mi	1/Contracts-Grants/Regional	-Contacts.aspx
	псер	://www.OHL:Hdvy.ma		
Full Delegation				
29. TERMS AND CONDITIONS: The following		d horoin by reference Wi	th the same force and effect as if they v	vere given in full text.
29. TERMS AND CONDITIONS: The following Upon request the awarding office contact name	i terms and conditions are incorporate led in block 22 will make their full text	available, or they can be	found as described below.	
DOCUMENT				
The following documents may be http://www.onr.navy.mil/Contra	: found at:	al/grants-propos	al/grants-terms-condition	s.aspx
Standard Terms and Conditions	for Research Grants - Ju	ne 2011 (Core)	ency Specific)	i
Standard Terms and Conditions Standard Terms and Conditions	for Research Granes - re	Didary Zorr (115)	,	
UACC Acceptance C UAWA Award A				
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30. OPTIONS OPTION NO.	741.001	•		
(1)				
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				tion as termination of
(4) 31, REPORTS: The following reports must be	submitted to the indicated addresses	es, in the indicated quant	ities, within 90 days following the expira Unless otherwise stated in the award/	modification, complete
31. REPORTS: The following reports must be the project. Final Technical Reports must hav Block 12a of the SF298 as follows: "Approved			. Olinood Chief Mitt Chief	
l	REPORT TYPE			COPIES
ADDRESSEE	Finel Mod	hnigal Report	with SF298	1
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	with SF29		•	
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See block #23a	Report of	Inventions an	d Subcontracts - DD 882	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$
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	Interim R	esearch Perior Jeral Financial	Status Report - SF425	- 1
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Defense Technical Informat 8725 John J Kingman Road S		esearch Perfor	mance Report (As Requi)	ced) 1
Fort Belvoir, VA 22060-623				
FOIL BETVOIL, VA 22000 025				
			3 Gubantragta - DD 881	2 1
See block #26a	Report of	Inventions an	d Subcontracts - DD 882	1
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Naval Research Laboratory	Final Ter	chnical Report		1
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4555 Overlook Avenue SW	with SF29	98		
Washington, DC 20375-5320				.
		33 FOR THE UNI	TED STATES OF AMERICA	
32. FOR THE RECIPIENT 32a. SIGNATURE OF PERSON AUTHORIZ	ZED TO SIGN	33a, SIGNATURE	OF AWARDING OFFICER	
		(b) (6)		
N/A - SIGNATURE NOT REC	JUIRED ON THIS AWARD	(0) (0)		
		The control of the co	PITE OF AWARD OFFICER	33c. DATE SIGNED
32b. NAME AND TITLE OF SIGNER	32c. DATE SIGN	ED 33b. NAME AND Ellen Simo	TITLE OF AWARD OFFICER	28-OCT-14
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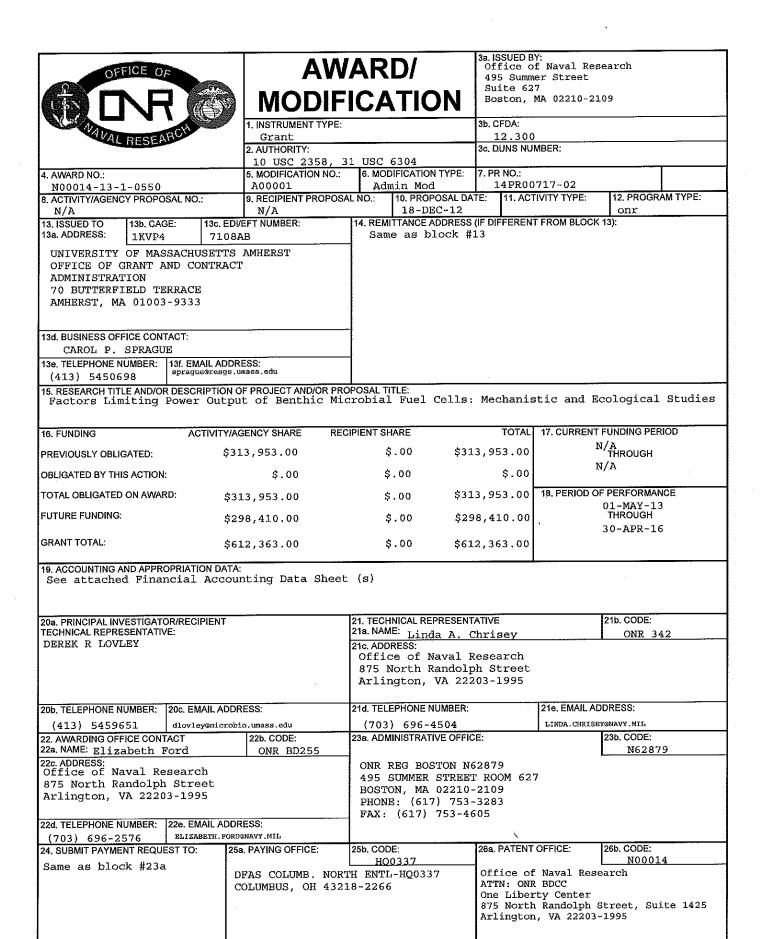
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L) 3. MOD (CRITICAL) 4. PR NUMBER		7.	COST CODE		00000	PAGE TOTAL	GRAND TOTAL.	d with the state of the control of the state	
4. PR NUMBER	15PR02052-00		L J. K.		00000 00000 00000			SIGNATURE	
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2. SPIIN (CRITICAL)			D. E.	CLA	M1AE 410 RA				
			B. C. APPROPRIATION SUBHEAD		V1 V1				
1. CONTRACT NUMBER (CRITICAL)	N00014-13-1-055	6. LINE OF ACI	CLINSLIN A. B. APPROPRI	(CRITICAL)	U 작			PREPARED/AUTORIZED BY:	DAIE:

	NAVY INTERNAL USE ONLY REF DOC/ACRN		A CONTRACTOR OF THE PROPERTY O	RACT REVIEWED
	AMOUNT (CRITICAL)			for COMPTROLLER, ONR CONTRACT REVIEWED
3. MOD (CRITICAL) 4. PR NUMBER P00003 15PR02052-00	ACCOUNTING CITATION	page is intentionally blank	PAGE 101 AL	COMPTROLLER APPROVAL: FOR FISCAL DATA AND SIGNATURE BY DATE:
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AWARD NO. N00014-13-1-0550	SPECIAL REQUIREMENTS	P00003	
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AWARD NO.	AWAI	RD/MODIF	CATION	MODIFICATION NO. A00001	
N00014-13-1-0550 27. SPECIAL INSTRUCTIONS:		<u> </u>		1100001	
See "Special Requirements"	Attachment				
- · · · · · · · · · · · · · · · · · · ·					
28. DELEGATIONS: The administration duties li	sted below have b	een delegated to the a	administrative office (t	block 23a). Upon request the awarding o	ffice contact (block 22)
will make their full text available. Please direct q	uestions to the cor	ntacts @: http://w	ww.onr.navy.mi	1/Contracts-Grants/Regional-	Contacts.aspx
Full Delegation					·
29. TERMS AND CONDITIONS: The following t	erms and condition	ns are incorporated he	rein by reference with	the same force and effect as if they we	re given in full text.
Upon request the awarding office contact name	d in block 22 will m	ake their full text avai	lable, or they can be f	ound as described below.	
DOCUMENT The following documents may be	found at:			-1/mmnts torms_sonditions	agny
The following documents may be http://www.onr.navy.mil/Contrac				ar/granes-terms-conditions	. aspr
Standard Terms and Conditions f Standard Terms and Conditions f	or Research	Grants - June	2011 (Core)	ncv Specific)	
Standard Terms and Conditions I UAAC UACC Acceptance C November	or Research	Granes - repre	ary zorr (ngo.	.o, up	
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30, OPTIONS OPTION NO.		AMOUNT		PERIOD	
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(4) 31. REPORTS: The following reports must be s	submitted to the inc	licated addressees, in	the indicated quantiti	les, within 90 days following the expiration	on or termination of
31. REPORTS: The following reports must be s the project. Final Technical Reports must have Block 12a of the SF298 as follows: "Approved f	a SF298, Report L	Jocumentation Page, a	accompanying mem.	Othess officialise stated in the award in	
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,		Interim Rese with SF298	earch Perform	ance Report (As Require	α) Ι
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Naval Research Laboratory ATTN: CODE 5596		Final Techni	ical Report earch Perform	mance Report (As Require	
4555 Overlook Avenue SW		with SF298			
Washington, DC 20375-5320					
32, FOR THE RECIPIENT				ED STATES OF AMERICA	
32a SIGNATURE OF PERSON AUTHORIZE	D TO SIGN		33a. SIGNATURE 0 (b) (6)	F AWARDING OFFICER	-
N/A - SIGNATURE NOT REQU	IIRED ON THI	S AWARD			
					33c, DATE SIGNED
32b. NAME AND TITLE OF SIGNER	3	26. DATE SIGNED	33b.NAME AND TII Valarie A.	TLE OF AWARD OFFICER Woodbury	22-APR-14

Valarie A. Woodbury

	NAVY INTERNAL USE ONLY REF DOC/ACRN				for COMPTROLLER, ONR CONTRACT REVIEWED	
	AMOUNT (CRITICAL)		00	\$.000	for COMPTROLLER,	
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1. CONTRACT NUMBER (CRITICAL) 2. NO 0.014 - 13 - 1 - 0.550	UNTING B. APPROPRIATION (CRITICAL)			PREPARED/AUTORIZED BY:		UAIE:

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2. SPIIN (CRITICAL.)	ACK	This			
1. CONTRACT NUMBER (CRITICAL) NO0014-13-1-0550	5. 6. ACRN 7. (CRTICAL)				PREPARED/AUTHORIZED BY:

AWARD NO.

N00014-13-1-0550

SPECIAL REQUIREMENTS

MODIFICATION NO.
A00001

The purpose of this administrative modification is to: (A) change the payment office and (B) add instructions for numbering vouchers:

A. The payment office is hereby changed:

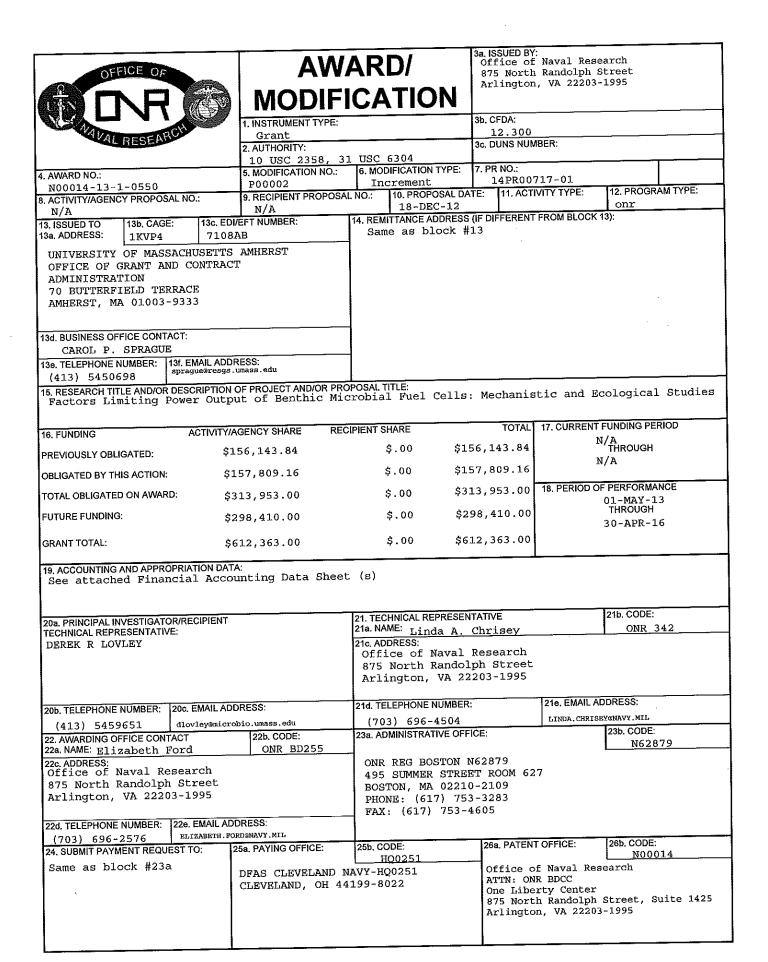
From: DFAS COLUMBUS NAVY ACQ 3990 E. BROAD STREET BLDG. 21 COLUMBUS, OH 43213 CODE HQ0251

To: DFAS-COLUMBUS CENTER NORTH ENTITLEMENT OPERATIONS P.O. BOX 182266 COLUMBUS, OH 43218-2266 CODE HQ0337

B. The following payment instructions are hereby added:

NUMBERING OF VOUCHERS SUBMITTED TO MOCAS PAYMENT OFFICES Vouchers submitted to this payment office must be submitted using the following format:

- Voucher numbers must begin with BVN.
- Voucher number must be 7 characters
- The format must be BVNX###, where X = Alpha or Numeric character and # = Numeric character.



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AWARD NO.	AWARD/	MODIF	ICATION	MODIFICATION NO. P00002	
N00014-13-1-0550	, , , , , , , , , , , , , , , , , , , ,			P00002	
27. SPECIAL INSTRUCTIONS:					
See "Special Requirements" At	tachment				ļ
28. DELEGATIONS: The administration duties liste	No. day bear bear at-		administrativa office (block 23a). Upon request the awarding	office contact (block 22)
28. DELEGATIONS: The administration duties liste will make their full text available. Please direct ques	d below have been de tions to the contacts (negated to the	auministrative onice (i	block 25a). Opon request the attaining	G t t t t
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29. TERMS AND CONDITIONS: The following term Upon request the awarding office contact named in	is and conditions are i	ncorporated h	erein by reference with	n the same force and effect as if they w found as described below.	eje giveji ili iuli text.
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the project. Final Technical Reports must have a S	F298. Report Docume	ntation Page,	accompanying them. I	Unless otherwise stated in the award/m	odification, complete
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See block #23a	Repo	ort of I	nventions and	Subcontracts - DD 882	1
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13d, BUSINESS OFFIC	PRAGUE				1								
13e, TELEPHONE NUM (413) 5450698	MBER: '	13f. EMAIL ADE sprague@resgs	.umass.edu										
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20b. TELEPHONE NUM	MBER:	20c, EMAIL AD	DRESS:		21d. TEL	EPHONE N	JMBER:			21e, EMA	VIL ADD	RESS:	
(413) 545965			obio.umass.edu			3) 696-4				LINDA.CE		NAVY MIL	
22. AWARDING OFFIC 22a. NAME: Elizab	CE CONT	ACT	22b. CODE: ONR BD0	125	23a, ADI	MINISTRATI	VE OFFICI	E:				23b. CODE: N628	79
220. ADDRESS: Office of Naval Research 875 North Randolph Street Arlington, VA 22203-1995 22d. TELEPHONE NUMBER: 220. EMAIL ADDRESS:				495 BOST PHON	ONR REG BOSTON N62879 495 SUMMER STREET ROOM 627 BOSTON, MA 02210-2109 PHONE: (617) 753-3283 FAX: (617) 753-4605								
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77.SPECIAL INSTRUCTIONS: See "Special Requirements" A						
28. DELEGATIONS: The administration duties lis	ted below have been deleg	gated to the a	dministrative office (block 23a). Upon request the awarding	ng office co	ntact (block 22)
will make their full text available. Please direct qu	esticits to the contacts (g.	http://w	ww.onr.navy.mi	l/Contracts-Grants/Region		- CCB. uSpx
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325. NAME AND TITLE OF SIGNER	32c, DAT	E SIGNED	33b. NAME AND T Ellen Simo	ITLE OF AWARD OFFICER noff		-NOV-13

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